

**MEMORANDUM**

DATE: May 7, 2020

TO: Hazardous Waste Enforcement File  
Green America Recycling, LLC  
Hannibal, Ralls County, MO  
EPA ID # MOD054018288

FROM: Cheyenne Bure  
Hazardous Waste Enforcement Unit  
Waste Management Program

SUBJECT: Site Visit – Green America Recycling, LLC  
10107 Hwy 79  
Hannibal, MO 63401

On March 11, 2020, a site visit was conducted at Green America Recycling by MoDNR Environmental Supervisor, Nicole Eby and myself. The site visit was requested by facility representative, (b) (6), (b) (7)(C). The purpose of the visit was to view the facility's drum puncturing procedure. For additional information and background on GAR, see EPA's May 14, 2019 inspection report.

(b) (6), (b) (7)(C) greeted us at the main office where we signed in. (b) (6), (b) (7) gave us a safety briefing and led us to CSA #4. We were introduced to (b) (6), (b) (7)(C),  
(b) (6), (b) (7)(C).

(b) (6), (b) (7)(C), explained the drum receiving process to us. Hazardous waste drums are received from generators of hazardous waste to be used as fuel for the kiln at GAR. The drums are taken to CSA #4 for staging before being used in the kiln. The drums are punctured to relieve pressure and occasionally sampled to confirm the content of the drum. The puncture hole is then closed using an expanding foam (Photo #8). The drums stored in CSA #4 are generally used in the kiln within 48 hours of receiving.

GAR uses a 'drum piercing' machine to de-pressurize incoming drums (Photos #3 - 5). A maximum of four drums may be placed on a pallet at one time and are loaded into the machine using a fork lift.

This puncturing process began after an incident when an employee was injured while opening a pressurized drum. The machine was made by GAR and does not have the means to capture emissions that escape from the drums during the piercing process. Additionally, the building in which CSA #4 is located, is not under negative pressure or have other means to capture fugitive emissions from this process.

The expanding foam that is used to close the puncture holes is not always compatible with the hazardous waste in the drums. When the foam is in contact with some waste it may dissolve, resulting in open containers. Two violations were cited in EPA's May 14, 2019 inspection report due to the incompatibility: Special Permit Condition I.E.1, Compatibility of Waste with Containers [40 C.F.R. 264.172] and Special Permit Condition I.F, Management of Containers [40 C.F.R. 264.173].

Additional photos were taken of the fire suppression system in CSA #4, fire house 1, and CSA #1 as requested by MoDNR permitting staff. After a brief walk through of above mentioned areas, Ms. Eby and I signed out at the front office. A determination on the allowance of the puncturing process and the use of expanding foam was not made at the time of the site visit.

Once final compliance determinations are made regarding the drum puncturing unit and use of the foam sealant are made these will be relayed to the facility.

Attachment:  
Photo Log (Photos #1- 37)



**Photograph: # 1.**  
**Taken By:** Cheyenne Bure  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Looking north in CSA #4. Drums are stored on northern side of building, totes are stored on the southern side of building.



**Photograph: # 2.**  
**Taken By:** Cheyenne Bure  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Fire extinguisher located on southern wall of CSA #4.



**Photograph: # 3.**  
**Taken By:** Cheyenne Bure  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Note 4 spikes for puncturing situated at the top of the unit.



**Photograph:** # 4.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Door to the drum puncturing machine, raised and partial view of puncturing spikes. Once drums are loaded into the machine a handle is used to lower the door and the spikes. The spikes puncture the drums to depressurize them while the door is closed to capture any projectiles while puncturing.



**Photograph:** # 5.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Inside the drum puncturing machine looking upwards. Facility says an 'explosion vent' is normally covering the hole. The vent is used to help prevent pressurized projectiles from escaping the unit but does not appear to capture emissions even when in place.





**Photograph: # 6.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** 55 gallon drums in storage, already punctured with foam sealing holes.



**Photograph: # 7.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** 55 gallon drums in storage, already punctured with foam sealing holes.



**Photograph: # 8.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Expanding foam used to close drums.



**Photograph: # 9.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Cubic yard containers for dry hazardous waste storage. Not all containers were properly closed. Used yellow PPE is shown here coming out of container.



**Photograph: # 10.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Cubic yard containers in storage.



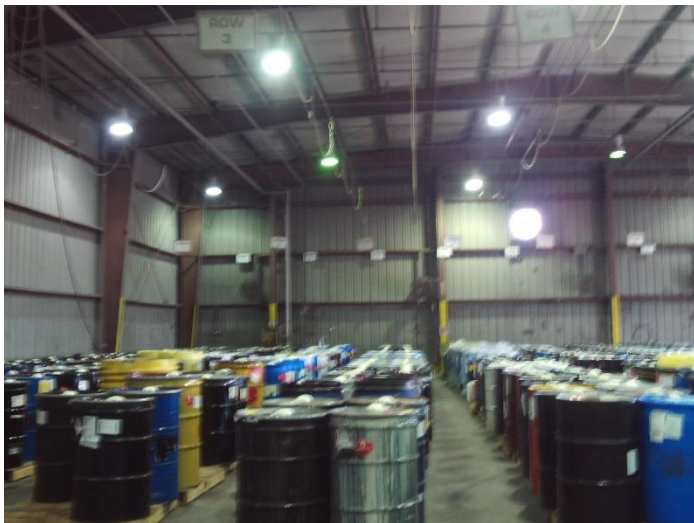
**Photograph: # 11.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Cubic yard containers in storage.

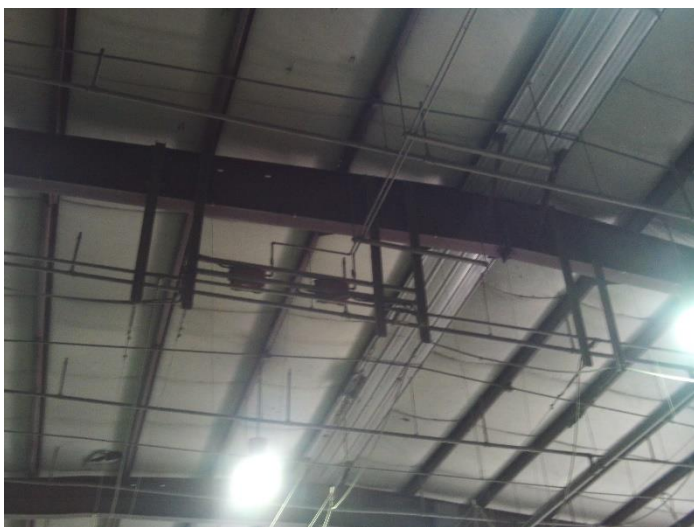




**Photograph: # 12.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Cubic yard containers and totes in storage.



**Photograph: # 13.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Hazardous waste drums in storage. Looking north.



**Photograph: # 14.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Fire suppression pipes are suspended from the ceiling.



**Photograph: # 15.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Fire suppression pipes suspended from ceiling.



**Photograph: # 16.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Fire suppression system sign on west wall.



**Photograph: # 17.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Fire suppression system is suspended on ceiling. Looking north.





**Photograph: # 18.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #4  
**Description:** Hazardous waste drums in storage. Sizes of the containers vary from 5 gallons to 55 gallon overpacks.



**Photograph: # 19.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Temperature reading inside Fire house #1, piping and signs describing how to shut down the ball mill and prep room systems.



**Photograph: # 20.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Signage on the ball mill sprinkler system in Fire House #1



**Photograph: # 21.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Fuse box and fire suppression system components sin Fire House #1



**Photograph: # 22.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Water line to Ball Mill Foam suppression system in Fire House #1



**Photograph: # 23.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Additional piping in Fire House #1





**Photograph:** # 24.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Valves and inspection tags for the Ball Mill Sprinkler System in Fire House 1.**



**Photograph:** # 25.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Close up of inspection tags in Photograph #24



**Photograph:** # 26.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management

**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Fire house #1  
**Description:** Signage on the Feed Prep sprinkler system in Fire House #1



FOAM HOUSE #1 WEEKLY INSPECTION						
INSPECTED:	OK	Not OK	Out of Service	Reason for O. of S.	Inspector Initials:	Date:
Heat > 50 degrees F.	<input checked="" type="checkbox"/>				Jr	3-11-20
Portable Emergency Light	<input checked="" type="checkbox"/>					
Fixed Emergency Lighting	<input checked="" type="checkbox"/>					
Air Compressor	<input checked="" type="checkbox"/>					
Mixture Drawed off of tank	<input checked="" type="checkbox"/>					
Grinder Discharge System						
Water Supply Valve- Open	<input checked="" type="checkbox"/>					
All Foam Manual Supply Valves- Open	<input checked="" type="checkbox"/>					
Foam Hydraulic Supply Valve- Closed	<input checked="" type="checkbox"/>					
Air Gauges for C-1s on marks	<input checked="" type="checkbox"/>					
Air Gauges for Pipe on marks	<input checked="" type="checkbox"/>					
All auxiliary red valves closed	<input checked="" type="checkbox"/>					
All auxiliary green valves open	<input checked="" type="checkbox"/>					
Bulk Mill Discharge System						
Water Supply Valve- Open	<input checked="" type="checkbox"/>					
All Foam Manual Supply Valves- Open	<input checked="" type="checkbox"/>					
Foam Hydraulic Supply Valve- Closed	<input checked="" type="checkbox"/>					
Air Gauges for C-1s on marks	<input checked="" type="checkbox"/>					
All auxiliary red valves closed	<input checked="" type="checkbox"/>					
All auxiliary green valves open	<input checked="" type="checkbox"/>					
Feed Prep #1 Dry Sprinkler System						
Water Supply Valve- Open	<input checked="" type="checkbox"/>					
All Foam Manual Supply Valves- Open	<input checked="" type="checkbox"/>					
Foam Hydraulic Supply Valve- Closed	<input checked="" type="checkbox"/>					
Air Gauges for C-1s on marks	<input checked="" type="checkbox"/>					
All auxiliary red valves closed	<input checked="" type="checkbox"/>					
All auxiliary green valves open	<input checked="" type="checkbox"/>					

**Photograph: # 27.**

**Taken By:** Nicole Eby

**Date Taken:** March 11, 2020

**Program:** Waste Management

**Entity:** Green America Recycling, LLC

**Permit:** MOD054018288

**Location:** Fire house #1

**Description:** Weekly inspection log for Fire House #1 for week of March 11, 2020.



**Photograph: # 28.**

**Taken By:** Nicole Eby

**Date Taken:** March 11, 2020

**Program:** Waste Management

**Entity:** Green America Recycling, LLC

**Permit:** MOD054018288

**Location:** Fire house #1

**Description:** View of front of Fire House #1, looking north east.



**Photograph: # 29.**

**Taken By:** Nicole Eby

**Date Taken:** March 11, 2020

**Program:** Waste Management

**Entity:** Green America Recycling, LLC

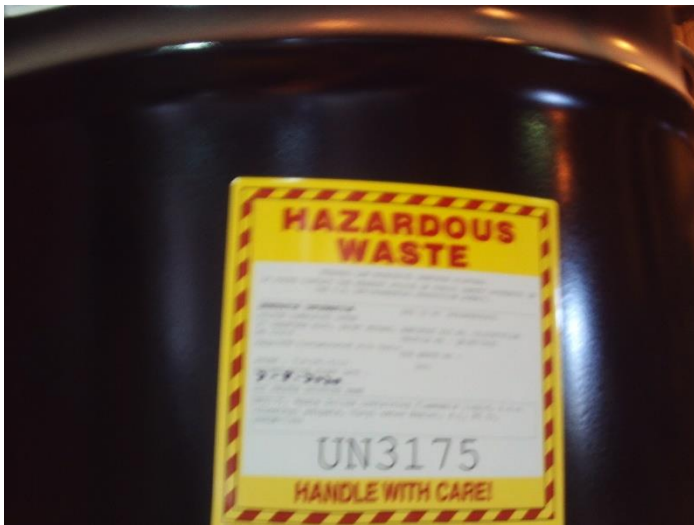
**Permit:** MOD054018288

**Location:** CSA #1

**Description:** Drums in storage in CSA #1



**Photograph: # 30.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** Drums in storage in CSA #1, facing north west.

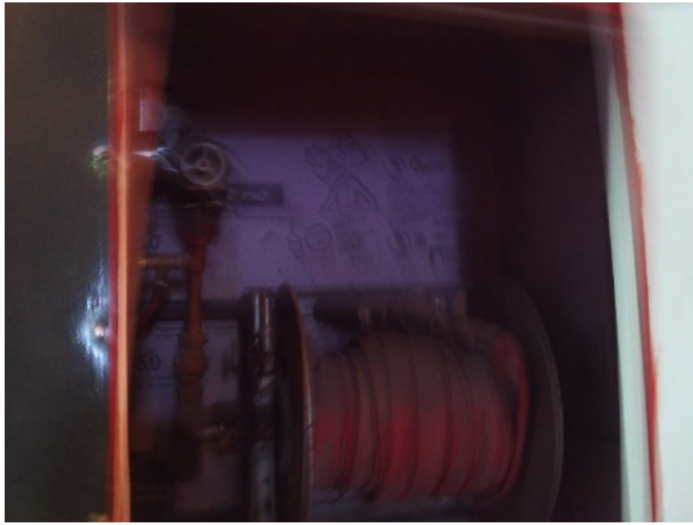


**Photograph: # 31.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** Close up of a label of a 55 gallon drum in storage.



**Photograph: # 32.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** View of fire suppression equipment on southwest wall.

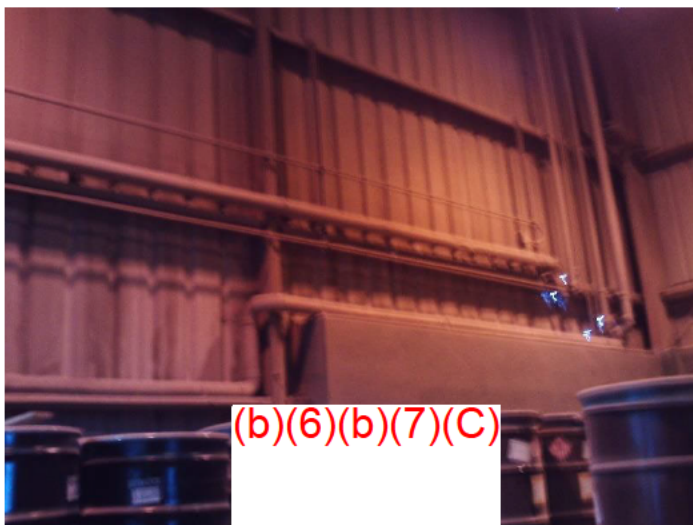




**Photograph: # 33.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** Inside of foam fire hose box, showing hose and directions.



**Photograph: # 34.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** Drum of firefighting foam.



**Photograph: # 35.**  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** CSA #1  
**Description:** Pipes for foam suppression system shown on southwest wall.





**Photograph:** # 36.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Feed Prep #2  
**Description:** Empty totes stacked in Feed Prep #2 area.



**Photograph:** # 37.  
**Taken By:** Nicole Eby  
**Date Taken:** March 11, 2020  
**Program:** Waste Management  
  
**Entity:** Green America Recycling, LLC  
**Permit:** MOD054018288  
**Location:** Tank Farm  
**Description:** View of hazardous waste tank, facing southeast.